Anti-Arkadia antibody

Description	Rabbit polyclonal to Arkadia.

Model	STJ91694
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human Arkadia
Immunogen Region	870-950 aa, C-terminal
Gene ID	54778
Gene Symbol	RNF111
Dilution range	WB 1:500-1:2000ELISA 1:40000
Specificity	Arkadia Polyclonal Antibody detects endogenous levels of Arkadia protein.
Tissue Specificity	Broadly expressed.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	E3 ubiquitin-protein ligase Arkadia RING finger protein 111 hRNF111 RING-type E3 ubiquitin transferase Arkadia
Molecular Weight	110 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:17384OMIM:605840
Alternative Names	E3 ubiquitin-protein ligase Arkadia RING finger protein 111 hRNF111 RING-type E3 ubiquitin transferase Arkadia
Function	E3 ubiquitin-protein ligase . Required for mesoderm patterning during embryonic development . Acts as an enhancer of the transcriptional responses of the SMAD2/SMAD3 effectors, which are activated downstream of BMP . Acts by mediating ubiquitination and degradation of SMAD inhibitors such as SMAD7, inducing their proteasomal degradation and thereby enhancing the transcriptional activity of TGF-beta and BMP . In addition to enhance transcription of SMAD2/SMAD3 effectors, also regulates their turnover by mediating their ubiquitination and subsequent degradation, coupling their activation with degradation, thereby ensuring that only effectors 'in use' are degraded . Activates SMAD3/SMAD4-dependent transcription by triggering signal-induced degradation of SNON isoform of SKIL . Associates with UBE2D2 as an E2 enzyme . Specifically binds polysumoylated chains via SUMO interaction motifs (SIMs) and mediates ubiquitination of sumoylated substrates . Catalyzes 'Lys-63'-linked ubiquitination of sumoylated XPC in response to UV irradiation, promoting nucleotide excision repair . Mediates ubiquitination and degradation of sumoylated PML . The regulation of the BMP-SMAD signaling is however independent of sumoylation and is not dependent of SUMO interaction motifs (SIMs) .
Sequence and Domain Family	The SUMO interaction motifs (SIMs) mediates the binding to polysumoylated substrate. The RING-type zinc finger mediates the E3 ubiquitin-protein ligase activity and binds directly to free ubiquitin . Non-covalent ubiquitin-binding stabilizes the ubiquitin-conjugating enzyme E2 (donor ubiquitin) in the 'closed' conformation and stimulates ubiquitin transfer .
Cellular Localization	Nucleus Cytoplasm Nucleus, PML body. Upon TGF-beta treatment, translocates from nucleus to cytosol.